

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

LISTING OF CLAIMS:

1. (currently amended) A nebulising dispenser head (1; 100) for a bottle that is elastically deformable by squeezing, comprising:

a channel for the liquid (4) with first and second ends,

the channel for liquid connected at the first end one of its ends to a suction tube (6) which draws a liquid contained within a bottle (2) under a volume of air and terminating, at its other the second end, with a nozzle of the liquid (7) in a mixing chamber (70),

the mixing chamber defined by a terminal element (3) facing said nozzle,

an orifice (31) for discharging the liquid outwards from the mixing chamber, and

a channel for air (5) communicating with said volume of air of the bottle (2), the channel for air (5) surrounding the channel for the liquid (4) and merging into said mixing chamber (70) formed by coupling with a terminal element which is applied facing said nozzle for the liquid (7) and is provided with an

~~orifice (31) for discharging outwards, characterised in that:~~  
wherein,

said channel for the liquid (4) and said channel for air (5) are formed in a ~~machined~~ block (10) of said dispenser head (1 ; 100) as in the form of a ribbed tubular segment (40) externally ribbed with ribs (42) and,

respectively, of said channel for air (5) comprises a wall (50) surrounding said channel of the liquid (4),

said wall (50) comprises with the formation of a ribbed tubular compartment (51) substantially coaxial to said ribbed tubular segment (40),

said wall (50) having an opening (52) for communication with said inner volume of air of the bottle (2), [[; -]]

said terminal element includes an ejection tip (3) with a tubular element (30) having a cavity [[so]] shaped [[as]] to axially narrow outwards in said discharge orifice (31) and terminate with a diverging segment (32),

said ejection tip (3) is being inserted with a proximal portion thereof into said ribbed tubular compartment (51) and defining to form said mixing chamber (70);

[[ -]] a sleeve (33) externally coaxial to said tubular element (30) being and integrally formed a sleeve (33) provided with an abutment (34) able to define defining a depth of insertion of the ejection tip into said tubular compartment (51) of the ~~machined~~ block (10), and [[; -]]

a sealing door (8) is being integrally hinged in a distal part (35) of said sleeve (33), the sealing door (8) being able to rotate rotatable by 180° from an open position to a closed position of said discharge orifice (31).

2. (currently amended) A dispenser head (1 ; 100) as claimed in claim 1, characterised in that further comprising:

a slit in the block (10), wherein,  
the ejection tip (3) has a centering centring element,  
the centering element being in the form of a plate (36) projecting from said sleeve (33) and able to be inserted insertable into said machined block (10) of dispenser head (1, 100) in a slit (11) obtained therein externally to said ribbed tubular compartment (51).

3. (currently amended) A dispenser head (1; 100) as claimed in claim 1, wherein, characterised in that

    said ejection tip (3) has a cylindrical distal end (37) in correspondence with the diverging segment (32) of the discharge orifice (31), the distal end (37) comprising forming an abutment step (38), and

    said sealing door (8) has a, in its face (80) destined to engage engaging with the ejection tip (3), a sealing ring (81) and, coaxially internal with the sealing ring thereto, a projecting pivot (82),

the sealing ring (81) being secured on the ejection tip  
(3) for the seal,

the projecting pivot (82) entering ~~being able to enter~~  
said final diverging segment (32) of the discharge orifice (31) –  
looking to lock the sealing door (8) in the closed position.

4. (currently amended) A dispenser head (1; 100) as  
claimed in claim 1, wherein, characterised in that

said wall (50) surrounding the channel for the liquid  
(5) has on, the a surface oriented towards the tubular segment  
(40) of the channel for the liquid (4), undercut portions (53),  
and

said tubular element (30) of the ejection tip (3) has  
on its an outer surface with corresponding projections (39), in  
use, destined to engage engaging said undercut portions (53).

5. (currently amended) A dispenser head (1) as claimed  
in claim 1, further comprising: characterised in that it has  
a snap-on tubular portion for snap-on connection (12),  
the snap-on tubular portion internally shaped with  
circumferentially equidistant protrusions (13) able to engage a  
peripheral projection (20) of the a neck of the bottle (2).

6. (currently amended) A dispenser head (100) as claimed in claim 1, further comprising: ~~characterised in that it includes~~

a gasket (130); and

a separate collar (120) internally threaded to be screwed, with the interposition of [[a]] the gasket (130), onto a bottle neck with a matching thread.

7. (new) A nebulising dispenser head for use with a bottle containing liquid, comprising:

a liquid channel (4) with first and second ends;

a suction tube (6) connected to the first end, in use the suction tube (6) to draw a liquid contained within a bottle (2) under a volume of air and terminating;

a liquid nozzle with a mixing chamber (70) connected to the second end;

a terminal element facing said nozzle;

an orifice (31), in use for discharging the liquid outwards from the mixing chamber;

an air channel (5) communicating with said volume of air of the bottle (2), the air channel (5) surrounding the liquid channel (4),

said liquid channel (4) formed as a externally ribbed tubular segment (40),

said air channel comprising a wall (50) surrounding  
    said liquid channel (4),

    said wall (50) comprising a ribbed tubular compartment  
(51) substantially coaxial to said ribbed tubular segment (40),

    said wall (50) having an opening (52), in use, for  
communication with said inner volume of air of the bottle (2),

    said terminal element including an ejection tip (3)  
with a tubular element (30) having a cavity axially narrowing  
outwards in said discharge orifice (31) and terminating with a  
diverging segment (32),

    said ejection tip (3) inserted with a proximal portion  
into said ribbed tubular compartment (51);

    a sleeve (33) externally coaxial to said tubular  
element (30) and integrally provided with an abutment (34)  
defining a depth of insertion of the ejection tip into said  
tubular compartment (51) of the block (10); and

    a sealing door (8) integrally hinged in a distal part  
(35) of said sleeve (33), the sealing door (8) rotatable from an  
open position to a closed position of said discharge orifice  
(31).

8. (new) A dispenser head as claimed in claim 7,  
wherein,

    the ejection tip (3) comprises a centering element,

the centering element is a plate (36) projecting from said sleeve (33).

9. (new) A dispenser head as claimed in claim 7, wherein,

said ejection tip (3) has a cylindrical distal end (37) in correspondence with the diverging segment (32) of the discharge orifice (31),

the distal end (37) comprises an abutment step (38),

said sealing door (8) has a face (80) engaging with the ejection tip (3), a sealing ring (81) and, coaxially internal with the sealing ring, a projecting pivot (82),

the projecting pivot (82) enters said final diverging segment (32) of the discharge orifice (31) to lock the sealing door (8) in the closed position.

10. (new) A dispenser head as claimed in claim 7, wherein,

said wall (50) surrounding the liquid channel (5) has undercut portions (53) on a surface oriented towards the tubular segment (40) of the liquid channel (4), and

said tubular element (30) of the ejection tip (3) has an outer surface with corresponding projections (39), in use, said corresponding projections (39) engaging said undercut portions (53).

11. (new) A dispenser head as claimed in claim 7,  
further comprising:

a snap-on tubular portion for snap-on connection (12),  
the snap-on tubular portion internally shaped with  
circumferentially protrusions (13) in use to engage a peripheral  
projection (20) of a neck of the bottle (2).

12. (new) A dispenser head as claimed in claim 7,  
further comprising:

a gasket (130); and  
a collar (120) internally threaded to be screwed, with  
interposition of the gasket (130), onto a bottle neck with a  
matching thread.